

# ORIGIN OF YELLOW FEVER.

[COMMUNICATED.]

NEW ORLEANS, March 19, 1880.

Editor of the Pensacola Advance:

DEAR SIR—My attention has been called, this day, to the letter of Dr. Hargis on yellow fever, published in your issue of March 10, 1880, and I respectfully submit that in opening your columns to a denunciatory attack, common justice requires that equal publicity should be given to the defense.

Dr. Hargis, whom I know, and have had reason to regard with friendship and respect, states: "The National Board of Health has been unfortunate in favoring the view that yellow fever is endemic in Cuba. The report of the Havana commission must, before another decade, meet, as it deserves, the strongest condemnation. Such is my opinion on this one point."

Dr. Hargis would confer a favor by stating when and where the National Board of Health "unfortunately favored" any such view. This board did instruct its Havana committee to investigate "the so-called endemicity of yellow fever in Cuba." I am not aware that it has ever said or done more than this to unfortunately favor a view, in opposition to which Dr. Hargis will find it difficult to cite one single Cuban authority, of any weight in medicine. In Cuba yellow fever is very certainly a "so-called endemic."

While this is the non-committal position of the National Board of Health, the Havana yellow fever commission calls attention to the indefiniteness of the signification of the word "endemic," and then states that if the word is accepted as signifying an habitual annual prevalence of a disease, and the existence of causes favoring its propagation, then the facts prove that yellow fever is endemic in certain localities of Cuba. The facts, on which this conclusion is based, are stated, so that no man can be led astray either by the indefiniteness of the word endemic, or by the theories and fancies of the commission, which, under the circumstances, will await with great equanimity the expiration of Dr. Hargis' fatal decade. So much for "this one point."

Dr. H. also writes: "It is difficult enough to get the Spanish government to do its duty towards this country by purifying the Pearl of the Antilles, and how can we hope for this energetic action when an American physician, clothed with all the prestige of authority, assures the world that yellow fever in Havana is inevitable?" I, Mr. Editor, am this unfortunate but unrepentant "American physician." Here again, as everywhere, the facts were first given, in order that "the world" might correctly judge the validity of the conclusion. Those facts are, briefly, that since 1761 yellow fever has annually prevailed in Havana; that all the favoring conditions during the past one hundred and twenty-eight years persist; that there were no evidences that these conditions would be arrested, and that as long as these conditions persisted it was inevitable that the effects would persist. The Havana commission is well assured of the correctness of the premises of this syllogism, and submits the conclusion with great confidence to the test of logic.

In fine, it seems that Dr. Hargis is an earnest advocate for the origin of yellow fever on ships, a view which the Havana yellow fever commission earnestly condemns, and here, I imagine, is the great cause of his offense against and condemnation at the commission. But the commission was careful to state the facts on which its opinion was founded, and feels very confident that however false this may be, all just and generous men will view with liberal charity any such conclusion when preceded by and accompanied with the very facts from which it was deduced.

In conclusion, Mr. Editor, permit me to make a prophecy about that "next decade" with which Dr. Hargis so unmercifully threatens the Havana yellow fever commission. This prophecy is, that at its expiration many more doctors than at present, though they are now numerous, will think it as idle a waste of words to discuss the origin of yellow fever as to discuss the origin of a cat or of a dog. The great practical question is with yellow fever (as with all vegetables, animals, and epidemic diseases), how is it propagated? For my own part, I have even less hope of determining the origin of yellow fever than the origin of small-pox, scarlatina, typhoid fever, cholera, trichina, tape worm, etc. Now, if Dr. Hargis will inform us how the causes of any of these originate, while handling with so much confidence the origin of yellow fever, he

will confer an inestimable favor on science and mankind. In order that the correctness of my statements may be tested, I forward you a copy of the report of the Havana yellow fever commission. Yours very truly,

SANFORD E. CHAILLE, M. D.,  
President of the Havana Yellow Fever Commission  
of the U. S. National Board of Health.

Editor of the Pensacola Advance:

SIR—Grateful am I, for the publication this day of my friend Dr. Chaille's remarks on my letter which appeared on the 10th inst. I have known Dr. Chaille for many years. It is the duty and privilege of professional men to discuss scientific questions, with ardor and force, based on intelligent conviction, whilst avoiding personalities. You, sir, have enabled Dr. Chaille to define his position, and to stand out in self-defense in the most manly attitude, not sheltered behind the titles of the Havana commission and the National Board of Health. I accept his challenge only for truth's victory and the demolition of specious argument or theory based on false premises.

Dr. Chaille holds himself responsible for "a concise preliminary report, stating the general results accomplished" by the Havana commission, so far, at all events, as the questions in dispute, and which refer to the endemicity of yellow fever in Cuba and the origin of the disease in ships and harbors.

Whichever mystery there might have been as to his interpretation of the word endemic it is dispelled. It is used by the Havana yellow fever commission to signify the "habitual annual prevalence of a disease and the existence of causes favoring its propagation." The "facts are briefly, that since 1761 the yellow fever has annually prevailed in Havana; that all the favoring conditions during the past one hundred and twenty-eight years persist; that there were no evidences that these conditions would be arrested, and that as long as these conditions persisted it was inevitable that the effects would persist."

Words in diplomacy may be used to conceal man's thoughts; the language of science should be precise. Webster, after Hoblyn, defines epidemic or endemic as signifying "peculiar to a people or a nation, and *endemicization* as equivalent to naturalization, to indicate an indigenous growth. We speak of *ague* as an endemic of the marshes. It is an *autochthonous* disease springing from the soil—from local conditions. Cholera is the endemic of Hindostan; and only known to us in America like yellow fever, as an imported plague, pestilence, or epidemic, and, at most, medical men have spoken of sporadic cases, to indicate isolated attacks, before or after epidemics, or as casual accidents. When the Havana commission, in its report, speaks of small-pox as endemic in Havana, it confounds yellow fever with the purely contagious maladies, and classes it where it cannot, for one moment, be placed by an enlightened pathologist. That Dr. Chaille commits this serious error is shown by the important conclusion, that it is as idle a waste of words to discuss the origin of yellow fever as to discuss the origin of a cat or a dog"—"for my own part" he adds: "I have even less hope of determining the origin of yellow fever than the origin of small-pox, scarlatina, typhoid fever, trichina, tape worm, etc."

The fact, sir, that yellow fever is totally unlike any of these diseases, that it is entirely specific and distinct, and, unlike any other known plague, invades land rather than springing and spreading from land, stamps it with peculiarities which enable us to determine its origin. There is no more interesting truth in pathology, nor one better established to those who are not blind or deaf to the clearest evidence, that the yellow fever poison, engendered and reproduced outside the human system, is the active cause of an infection and malignant pestilence which may travel under favorable conditions wherever man may go, even as far north as Quebec. The correct history of yellow fever places it indisputably amongst the localized diseases of the globe, and its habitat since the discovery of the new world, and not before, has been the tropical Atlantic. It has not originated in the Pacific, nor in the Indian ocean; in the Mediterranean, nor in the Red Sea. But within the tropical Atlantic belt the records of all islands and cities, including Havana, is the record of every American city, such as New Orleans and Pensacola.

Since, therefore, yellow fever has unquestionably its center of development on ships in the tropical Atlantic, and is transmissible from

the ship to the port and from the port back to the ship again, many intelligent and trustworthy observers, without prejudice and sophistry, have recorded the spontaneous development of the disease on the broad ocean. If the vast array of facts, carefully studied, indicate this to be possible and frequent, the acknowledged impossibility of tracing its land origin anywhere, indicates that I am fully justified in considering the disease in its inception as a ship fever.

Dr. Chaille did not hesitate in his concise report to devote ample space to the denunciation of this view and of those who entertained it. He said "there were formerly many, and there are still some few, who, without personal experience or extensive knowledge of the special subject, look upon it in a much simpler light. They pronounce yellow fever a 'nautical disease.' Until the publication last October of Prof. Gamgee's work, entitled 'Yellow Fever a Nautical Disease,' I was practically the only person who had since 1855 adopted and propagated the idea that yellow fever was a disease of ships at sea, and since 1859 I have been an active observer of six great epidemics in Mobile, New Orleans, Pensacola and Milton, besides an annual experience with many sporadic cases amongst the shipping in this bay and the United States marine hospital.

But Dr. Chaille thinks naval surgeons best entitled to credence, and quotes Dutroulau, who was compelled to publish in 1851 that in *not a single instance* of many infected vessels did the disease "originate on board." This is a sample of the authorities and facts given "in order that 'the world' might correctly judge the validity of the conclusions," and the Havana commission submits this "with great confidence to the test of logic."

There are not many physicians in this country who have access to French medical libraries, and Dr. Chaille has not sought the references, numerous enough, in the English language. His champion is Dutroulau, whose recorded facts and main conclusions Dr. Chaille passes over in profound silence, with the object I suppose, to use his own words, that "all just and generous men will view with liberal charity any such conclusions when preceded by and accompanied with" his own selection of data. I have not read Dutroulau's works, but I have before me the very able lecture delivered by Prof. Gamgee on the 20th of December in New Orleans on the possible extinction of yellow fever, and from which it appears that Auguste Frederic Dutroulau said in his thesis, published in 1842, that an indispensable condition of the focus of development (foyer d' emanation) is its maritime attribute." Nay, more, the examples are not rare of vessels in which yellow fever has declared itself spontaneously in the open sea (en pleine mer), and without having communicated with any infected land." He then reports a typical case, too long to be quoted, which occurred in 1833 in the brig Cuirassier, aboard of which Dutroulau was the surgeon in charge.

In 1853, in the Archives Generales de Medecine, Dutroulau distinguished the endemic or land miasms from the yellow fever poison which shuns the marshes. He said, yellow fever is limited to a very short distance from the seashore, whereas paludal fevers are observed wherever marsh miasma occurs, and authorizes the conclusion that the miasma of yellow fever derives one of its essential characters from the influence of the sea. More recently still, and in the very work quoted by Dr. Chaille in his report, Dutroulau declares, that the essential and primary cause of yellow fever is localized on the sea—an infection proper to certain maritime localities."

I am now actively engaged in the preparation of my work to be entitled "The Tropical Atlantic Plague, Yellow Fever," wherein I shall show how simple and grand the truth is, revealed by history, coupled with a wide experience in several cities of numerous epidemics. The science of pathology is not so hopelessly without basis, as Dr. Chaille indicates when he confounds plagues proper, the pure contagia ever propagated from pre-existing cases, such as small-pox with diseases like yellow fever of localized origin. Anxious as I am to see the work of the National Board of Health flourish for the salvation of our country, I trust to show yellow fever is an endemic of no land, in the sense in which the word endemic is defined by the profession at large. Once this is acknowledged, and the mercantile marine purified, yellow fever must become extinct.

I am, sir, your obedient servant,

ROBT B. S. HARGIS, M. D.

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